REMARKS

This is in response to the Office Action dated September 14, 2009. In view of the following remarks, reconsideration of the rejection and further examination are requested.

Rejections under 35 U.S.C §103(a):

Claims 3-7, 9-12, 14, 16-22, and 32-41 have been rejected under 35 U.S.C §103(a) as being unpatentable over Hoffberg (US 6,400,996) in view of Han (US Pub. 2003/0028531) and further in view of Leshem (US 5,870,559). This rejection is submitted to be inapplicable to the claims for the following reasons.

Claim 32 recites, in part, that the episode analysis unit (i) creates new episodes by extracting subtrees having, as new roots, nodes which are offspring of a node equivalent to a root of the frequent pattern tree, tracking nodes within each of the extracted subtrees starting from the root, and combining element data stored in the nodes, (ii) recursively performs the subtree extraction and the episode creation on the created episodes until there are no more subtrees, and (iii) reconstructs the frequent pattern tree by integrating recursively constructed subtree frequent pattern trees, into positions in the frequent pattern tree. According to claim 32, an overall hierarchical tree is created, and then partial hierarchical trees are created. Next, *within the partial hierarchical tree,* (a) an overall hierarchical tree is created, and then (b) a partial hierarchical tree is created (i.e., (a) and (b) occur again within the partial hierarchical tree already generated). This recursive process repeats within each subtree until there are no more subtrees. The combination of Hoffberg, Han, and Leshem fails to disclose the above features, as recited in claim 32.

Hoffberg and Han are discussed in detail in the amendment of September 17, 2008. As noted, the combination of Hoffberg and Han does not disclose or suggest the above features of claim 32 (see page 24 of the amendment). Leshem also fails to disclose or suggest the above features, as recited in claim 32.

Leshem discloses a Visual Web Display (VWD) format that allows a user to view and navigate complicated web structures while visualizing the interrelationships between the data entities of such structures (see col. 11, lines 10-13). In the VWD format, child nodes 48 are displayed relative to their respective parent nodes 44, as shown in Figure 3 (see col.11, lines 18-25). In addition, Figure 2 shows an example where the child nodes have grandchild nodes (with

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respect to the parent node). The recursive visual mapping methodology has a layout that resembles a solar system, with the home page positioned as the sun, the child nodes being in orbit around the sun, and the grandchild nodes being in orbit around the child nodes (see col. 12, lines 9-15). In Figure 1, all of the nodes are displayed as having a single incoming link, even though some of the URLs actually have multiple incoming links (see col. 12, lines 37-41). This is achieved by recursively searching (i.e., searching for a particular type of file within a file of the same type) the web pages and visually displaying the results. This process allows a web site to be displayed visually in a tree format, without actually using a tree format for the web site (see col. 12, lines 41-44), allowing for each URL to be displayed exactly once in the site map (see col. 12, lines 51-55).

Thus, Leshem discloses visually displaying the results of a recursive search, where the hierarchical structure of a web site is recursively searched and the results are visually displayed in a simplified tree structure. However, Leshem does not disclose or suggest recursively constructing partial hierarchical trees as described above with regard to claim 32. Therefore, Leshem does not disclose or suggest that the episode analysis unit (i) creates new episodes by extracting subtrees having, as new roots, nodes which are offspring of a node equivalent to a root of the frequent pattern tree, tracking nodes within each of the extracted subtrees starting from the root, and combining element data stored in the nodes, (ii) recursively performs the subtree extraction and the episode creation on the created episodes until there are no more subtrees, and (iii) reconstructs the frequent pattern tree by integrating recursively constructed subtree frequent pattern trees, into positions in the frequent pattern tree, as recited in claim 32.

Accordingly, no combination of Hoffberg, Han, and Leshem would result in, or otherwise render obvious under 35 U.S.C. §103(a), the features recited in claim 32. As a result, claim 32 is patentable over the combination of Hoffberg, Han, and Leshem.

Claims 35, 36, 39, and 40 are patentable over the combination of Hoffberg, Han, and Leshem for the same reasons as those discussed above with regard to independent claim 32. Specifically, claims 35, 36, 39, and 40 recite that the episode analysis unit (i) creates new episodes by extracting subtrees having, as new roots, nodes which are offspring of a node equivalent to a root of the frequent pattern tree, tracking nodes within each of the extracted subtrees starting from the root, and combining element data stored in the nodes, (ii) recursively performs the subtree extraction and the episode creation on the created episodes until there are

no more subtrees, and (iii) reconstructs the frequent pattern tree by integrating recursively constructed subtree frequent pattern trees, into positions in the frequent pattern tree. Since the above features of claims 35, 36, 39, and 40 are not disclosed or suggested by the combination of Hoffberg, Han, and Leshem, claims 35, 36, 39, and 40 are patentable over the combination of Hoffberg, Han, and Leshem.

Claims 33, 34, 37, and 38 are patentable over the combination of Hoffberg, Han, and Leshem for reasons similar to those discussed above with regard to independent claim 32. Specifically, claims 33, 34, 37, and 38 recite creating new episodes by extracting subtrees having, as new roots, nodes which are offspring of a node equivalent to a root of the frequent pattern tree, tracking nodes within each of the extracted subtrees starting from the root, and combining element data stored in the nodes, performing, recursively, the subtree extraction and said creating new episode operation on the created new episodes until there are no more subtrees, and reconstructing the frequent pattern tree by integrating recursively constructed subtree frequent pattern trees, into positions in the frequent pattern tree. Since the above features of claims 33, 34, 37, and 38 are not disclosed or suggested by the combination of Hoffberg, Han, and Leshem, claims 33, 34, 37, and 38 are patentable over the combination of Hoffberg, Han, and Leshem.

Claims 3-7, 9-22, and 41 are either directly or indirectly dependent on independent claim 32. Therefore, claims 3-7, 9-22, and 32-41 are allowable over the combination of Hoffberg, Han, and Leshem.

Because of the above-mentioned distinctions, it is believed clear that claims 3-7, 9-22, and 32-41 are allowable over the references relied upon in the rejections. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of the invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 3-7, 9-22, and 32-41. Therefore, it is submitted that claims 3-7, 9-22, and 32-41 are clearly allowable over the prior art of record.

In view of the above remarks, it is submitted that the present application is now in condition for allowance. The examiner is invited to contact the undersigned by telephone if it is felt that there are issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

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